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April 26, 2012

Re: Riverside Boulevard and West 68<sup>th</sup> Street Ramp

Coalition for a Livable West Side:

On Friday, April 13, 2012, I inspected the ramp in Riverside Park located at the intersection of Riverside Boulevard and West 68<sup>th</sup> Street. Subsequently, I issued a report of my findings related to the accessibility of the ramp, or lack thereof. My findings were based on the 1991 Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Building Code of New York City (BCNYC).

To summarize my report, there are a number of issues with the ramp that not only affect the accessibility, but also potentially the safety of all people with or without disabilities.

Slopes in general did not comply with required measurements. Both the ADAAG and the BCNYC require ramps slope less than 8.33% (1:12). While many segments of the ramp had averages in compliance, every segment had portions that exceeded the required maximum slope allowed. The slope of a ramp is important for a person in a wheelchair going both up and down the ramp. Too steep of a slope going down the ramp could result in a wheelchair user losing control. This could lead to an uncontrolled descent. Too steep of a slope going up the ramp could limit wheelchair users from even using the route. Many people with mobility disabilities have limited strength to overcome changes in elevation. It should be noted that all users with or without disabilities benefit from having ramps that comply with the accessibility standards, including bicycle riders and parents pushing baby strollers. The steepness of a ramp will either encourage or discourage use of a route.

Landings were also found to be not in compliance. For every 30 inches of elevation change, a 60 inch minimum deep level landing is required. None of the landings between ramp segments measured 60 inches deep. All landings only measured 48 inches deep. Landings are important for a number of reasons including: they provide rest between ramp segments and they provide an opportunity to turn around. Rest and turn around space is beneficial for all users, not just users in wheelchairs.

Also noted in my report are non-complaint cross slopes and changes in elevations. Both the ADAAG and the BCNYC require cross slopes not to exceed 2.00% (1:48). Much of the ramp exceeded this amount. Often the steeper areas were due to the asphalt construction which has settled in some places. The settling not only creates steep cross slopes, but also areas where ponding of water can occur. Ponding of water can be especially problematic in the winter season

when the water freezes and creates slipping hazards. The noted changes in elevation were due to concrete joints between asphalt segments. Again, the asphalt has probably settled and the concrete now projects higher than the asphalt surface. Both ADAAG and BCNYC requirements allow up to ¼ inch vertical, or ½ inch beveled 1:2 (50%). Unfortunately, many of the concrete joints measured ½ vertical, some even measure up to ¾ inch vertical. Wheelchair users are unable to overcome such changes in elevations and can be tripping hazards for fully mobile users of the ramp.

In conclusion, it is my recommendation to provide a ramp that fully complies with all accessibility requirements. One option could be to completely replace the existing non-compliant ramp with one that has correct slopes, landings, and elevation changes. I could also envision a new switch-back ramp adjacent to the steps at the end of West 68<sup>th</sup> Street. In general, a switch-back design can have many additional benefits over the straight ramp design as currently provided. Mainly, switch-backs are much more effective at prohibiting uncontrolled descents (by wheelchairs, bicycles, and baby strollers). The changes in direction limit the distance an out-of-control object can descend. Additionally, I noticed that while bicyclists are required to walk their bicycles down the ramp, straight runs tend to encourage riding as opposed to walking. A switch back, on the other hand, is much harder to navigate and often requires a bicyclist to walk his/her bicycle around the switch-backs.

Sincerely,

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United Spinal Association  
Accessibility Services